

MIL ON With DTC P060A47

Service Category Vehicle Interior

Section Meter/Gauge/Display

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021	Mirai	

Introduction

Some 2021 model year Mirai vehicles may exhibit a MIL ON condition with Diagnostic Trouble Code (DTC) P060A47 (Hybrid/EV Battery Energy Control Module Monitoring Processor Watchdog / Safety MCU Failure) present. The Fuel Cell Vehicle (FCV) control computer logic has been modified to reduce the possibility of this condition. Follow the Repair Procedure in this bulletin to address this condition.

Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	MODEL YEAR	GRADE	PRODUCTION CHANGE EFFECTIVE VIN
Mirai	2021	Limited	JTDAAAAA#MA003224
		XLE	JTDAAAAA#MA003225

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
890861	Reprogram FCV Control Computer	0.5	89981-62160	8A	71

APPLICABLE WARRANTY

- This repair is covered under the Toyota Fuel Cell Component Warranty. This warranty is in effect for 96 months or 100,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Parts Information

PART NUMBER	PART NAME	QTY
89981-62160	FCV Control Computer	–
00451-00001-LBL	Authorized Modifications Label	1

NOTE

- The FCV control computer should NOT be replaced as part of the Repair Procedure.
- Authorized Modifications Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through *Dealer Daily – Parts – Dealer Support Materials Orders*.

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Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Battery Diagnostic Tool*	DCA-8000P T	1

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVI*	ADE	TSADVUNIT	1
Techstream 2.0		TS2UNIT	
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 16.10.017 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Calibration Information

MODEL	ENGINE	CALIBRATION ID	
		PREVIOUS	NEW
Mirai	3KM	899836216100	899836216400/ 899856202100
		899836216200	
		899836216300	
		899856202000	

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Repair Procedure

1. Confirm the condition exists.

Does the vehicle exhibit a MIL ON condition with DTC P060A47 present?

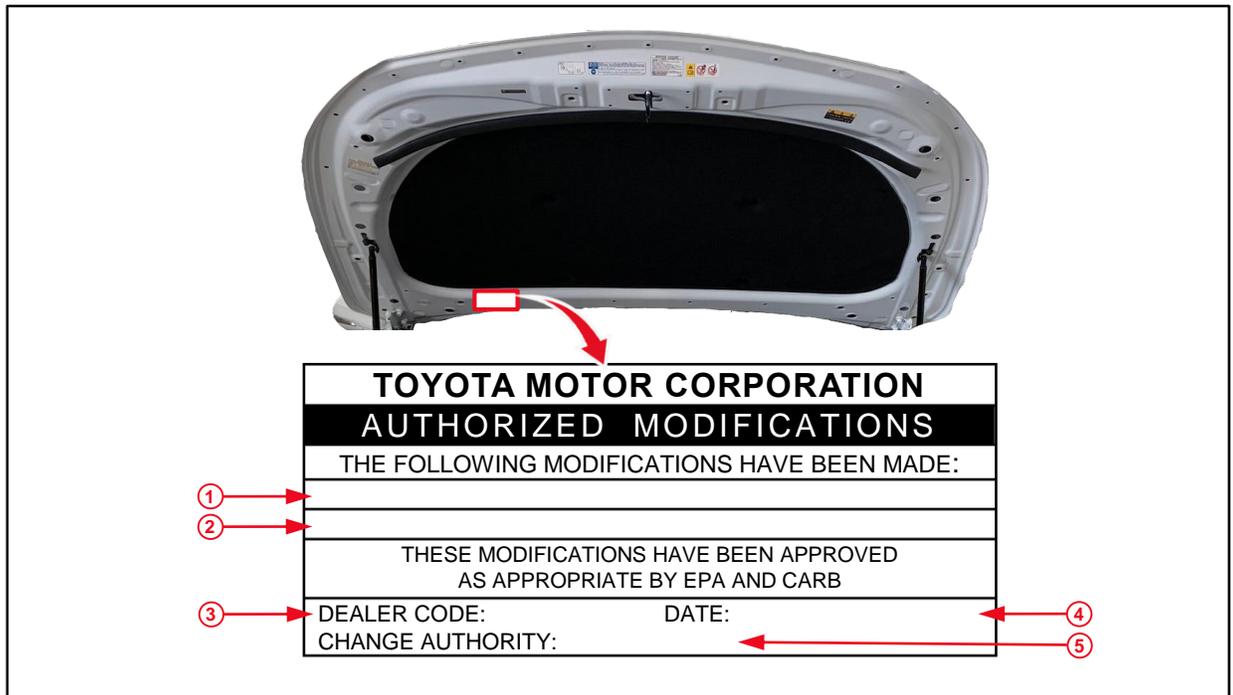
- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

2. Use Techstream to confirm if the FCV control computer calibration has been updated and check for the Authorized Modifications Label affixed to the vehicle in the location shown below.

Is the calibration ID listed in Techstream and on the label the latest FCV control computer calibration?

- **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- **NO** — Continue to step 3.

Figure 1. Location of Authorized Modifications Label on 2021 Mirai



1	Replacement FCV Control Computer Part Number (e.g., 89981-62160)
2	New Calibration ID (e.g., 899836216400)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (continued)

- Flash reprogram FCV control computer.

NOTE

- The battery diagnostic tool MUST be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming the vehicle.
- For details on how to use the battery diagnostic station, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in [T-SB-0107-20](#), *ECU Flash Reprogramming With Security Signature*, and flash the FCV control computer with the NEW calibration file update.

- Prepare and install the Authorized Modifications Label.
 - Using a permanent marker, enter the following information on the label:
 - FCV control computer part number [*Refer to the **Parts Information** section for the **NEW PART NUMBER***]
 - Calibration ID(s) [*Refer to the **Calibration Information** section for the **NEW CALIBRATION ID***]
 - Dealer Code
 - Repair Date
 - Change Authority [***This bulletin number***]
 - Install the Authorized Modifications Label onto the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
- Using Techstream, perform a Health Check to confirm that the NEW calibrations updated successfully.

- Using Techstream, clear ALL DTCs and confirm proper vehicle operation.

NOTE

If you cannot clear some DTCs perform the following tasks:

- Turn the vehicle OFF.
- Wait at least 10 minutes.
- Ready ON the vehicle and attempt to clear DTCs again.